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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,905	10/23/2000	Klaus Gradischnig	SIEM0015U/US	7207

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EXAMINER

NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,905

Applicant(s)

GRADISCHNIG, KLAUS

Examiner

Quang N. Nguyen

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☒ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Detailed Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/21/2004 has been entered.

Claims 1-2, 11 and 13 have been amended. Claims 14-18 have been added as new claims. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3, 5-8, 10-12, 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson (US 5,521,902), in view of Christiansen et al. (US 6,075,855), hereinafter referred as Christiansen.**

4. As to claims 1 and 11, Ferguson teaches a signalling apparatus for processing signalling messages, comprising:

a signaling point (*a signaling point 20 as illustrated in Fig. 2*);

links via which the signalling point is connected to at least a second signaling apparatus (*signaling point 20 with PC=8 connects to signaling point 20 with PC=9 via links 18A, 18B and 18C as illustrated in Fig. 2*) (Ferguson, C4: L13-21);

at least one signalling system within said signaling point (*signaling point 20 with PC=8*) that sends signalling messages to the second signaling apparatus or, respectively, receives signalling messages from the second signaling apparatus via said links (*signalling point 20 with PC=8 sends/receives signalling messages to/from signalling point 20 with PC=9 via links 18A, 18B and 18C as in Fig. 2*) (Ferguson, C4: L13-21);

wherein said signaling system respectively allocates a signalling network identity to said links (*for example, link 18A is uniquely identified or allocated by the triplet "8,9,1", link 18B as "9,8,2", etc.*) (Ferguson, Fig. 2 and C4: L22-38).

However, Ferguson does not explicitly teach at least one of said links is returned in a loop from the signaling point to the same signaling point as a loop link, wherein different signaling network identities are allocated to the loop link at an output and input side by the signaling system; and wherein said loop link comprises at least one of a network tunnel and a signaling tunnel.

In a related art, Christiansen teaches a system and method of accessing a Service Control Point (SCP) in an ISUP network, wherein a link is returned in a loop

from a signaling point to the same signaling point as a loop link (*i.e.*, a *loop-back trunk 6* has an *outbound side* and an *inbound side* with respect to *MSC 4* as in *Fig. 1*), wherein different signaling network identities are allocated to the loop link at an output and input side by the signaling system (*to MSC 4, loop-back trunk 6 appears as two independent trunks, each having a unique identification at the switch*) and said loop link comprises at least one of a network tunnel and a signaling tunnel (*i.e.*, *MSC 4 controls outbound calls to SCP 7 on the outbound trunk of loop-back trunk 6 and SCP 7 controls inbound calls to MSC 4 on the inbound trunk of loop-back trunk 6*) (Christiansen, C3: L13-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Ferguson and Christiansen to include at least one of said links is returned in a loop from the signaling point to the same signaling point as a loop link, wherein different signaling network identities are allocated to the loop link at an output and input side by the signaling system; and wherein said loop link comprises at least one of a network tunnel and a signaling tunnel since such methods were conventionally employed in the art to provide a method in an ISUP network that will allow a connection to an intermediate destination followed by a connection to a final destination without complete call tear down upon release of the intermediate circuit (*i.e.*, *the SCP*) (Christiansen, C2: L24-31).

5. As to claim 2, Ferguson-Christiansen teaches the signalling apparatus of claim 1, wherein said signalling system, with assistance of said loop link communicates

signalling messages between two signaling systems contained in the signaling point (Ferguson, C2: L44-45 and Christiansen, C3: L34-41).

6. As to claim 3, Ferguson-Christiansen teaches the signalling apparatus of claim 1, wherein said signalling system generates internal load for test purposes (*i.e., signalling link test messages are generated for test purposes*) with assistance of said loop link (Ferguson, C5: L4-15).

7. As to claim 5, Ferguson-Christiansen teaches the signalling apparatus of claim 1, wherein said signalling system is a signalling system according to No. 7 (*i.e., SS7/ISUP network of Fig. 1*) and allocates a same network identifier to said loop link at the output and input side (*preferably, both ends of loop-back trunk 6 have the same circuit identification code CIC*) (Christiansen, C3: L55-57).

8. Claims 6-8 and 10 are corresponding method claims of apparatus claims 1-3 and 5; therefore, they are rejected under the same rationale.

9. As to claim 12, Ferguson-Christiansen teaches the signaling apparatus of claim 1, with the addition of at least one routing table configured with at least one of said first unique network identity and said second unique network identity (*the local switch reserves an outgoing voice trunk to the intermediate exchange based on a routing table entry associated with the dialed number*) (Christiansen, C4: L7-21).

10. Claims 14-15 and 17 are corresponding apparatus claims of claims 2-3 and 5; therefore, they are rejected under the same rationale.

11. Claims 4, 9, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson (US 5,521,902).

12. As to claim 4, 9 and 16, Ferguson teaches the signalling apparatus of claim 1, but does not explicitly teach said signalling system realizes an interworking communication with other networks with assistance of a said loop link.

However, as well known in the art that in SS7 networks, Service Switching Points "SSPs" 11 and Service Transfer Parts "STPs" 14 were conventionally employed and allocated in different networks.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Ferguson to utilize the assistance of a loop link at the SSPs and STPs in different networks to achieve an interworking communication with other networks because such Signal Transfer Points "STPs" (*which are multi-port, high-speed packet switches that are programmed to respond to the routing information and route a packet to its destination*) were conventionally employed in the art to interconnect between networks via a SS7 data link.

13. As to claim 18, Ferguson teaches the signaling apparatus of claim 1, further comprising at least a second signaling system within said signaling point *(as well known in the art that each of the network nodes, i.e., a signaling point, may include control units and storage units, wherein each control unit may include: microprocessors, microcontrollers, processor cards, computer systems and other control or computing devices to provide various processing and storage capabilities).*

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

15. Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Bressler (US 6,584,190).

16. As to claim 13, Bressler teaches a telephony communications system comprising:

allocating unique point codes to each of a plurality of signalling networks interconnecting a plurality of signalling points (*each network node or signalling point, SSP 20, STP 22 or STP 24 of Fig. 2 is assigned a unique point code*); and

routing a signal from a first network of said plurality of signalling networks to a second network of said plurality of signalling networks using said unique point codes via at least one of a network tunnel and a signaling tunnel (*numeric point codes are carried in control signalling messages exchanged between network nodes to identify the source and destination of each message and based on the point codes, an STP 22 accesses a routing table to select the appropriate signalling path for routing each message*) (Bressler, C5: L45-62).

17. Applicant's arguments as well as request for reconsideration filed on 07/21/2004 have been fully considered but they are moot in view of the new ground(s) of rejection.

18. Further references of interest are cited on Form PTO-892, which is an attachment to this office action.

19. A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER